

**FINAL DRAFT**  
**September 15, 2004**

# **LIME ISLAND MASTER PLAN**

Michigan Department of  
Natural Resources

Forest, Mineral, and Fire Management  
Division



# Lime Island Master Plan

# Table of Contents

<b>Introduction</b>	<b>part one</b>	<b>3</b>
<b>Goals and Objectives</b>	<b>part two</b>	<b>4</b>
<b>Inventory and Analysis</b>	<b>part three</b>	<b>5</b>
Natural Features		<b>5</b>
Vegetation		<b>5</b>
Soil Conditions		<b>6</b>
Topography		<b>7</b>
Wildlife		<b>7</b>
Constructed Features		<b>8</b>
<b>Development Opportunities</b>	<b>part four</b>	<b>9</b>
Waterfront Development		<b>9</b>
Harbor Front		<b>9</b>
Use Areas		<b>10</b>
Walkway		<b>10</b>
Camping Platforms and Boardwalk		<b>12</b>
Lime Kiln Site		<b>12</b>
Preservation		<b>12</b>
Island Center		<b>13</b>
Island Flag Court		<b>13</b>
Tent Camping Areas		<b>13</b>
Rustic Cabins		<b>14</b>
Victorian House		<b>15</b>
Universal Accessibility		<b>15</b>
One Room Schoolhouse		<b>16</b>
Trail System		<b>17</b>

Trail Enhancements		17
Common Tern Habitat Restoration		17
Signage Program		18
Directional Signs		18
Educational/Interpretive Signs		18
<b>Implementation</b>	<b>part five</b>	<b>20</b>
Harbor Waterfront Use Area		20
Industrial Walkway		20
Lime Kilns		20
Island Center		21
Rustic Cabins		21
Victorian House		21
One Room Schoolhouse		21
Trail System		22
Common Tern Habitat Restoration		22
Signage Program		22
<b>Summary</b>	<b>part six</b>	<b>23</b>

Nestled between Michigan's eastern upper peninsula and Ontario's St. Joseph Island, in the middle of the active St. Mary's River Shipping lane, lies a mere fraction of Michigan's 3.8 million acres of state forest land. Small in size, yet rich in natural and cultural resources, this unique island state forest also serves as a natural nautical navigational landmark. Passing freighters varying in shapes, size, cargo and ports of origin maneuver through the waters and around the island with a majestic grace and beauty. Constant, rhythmic engine sounds are subtle reminders of the island's industrial past.

Although significant island history can be traced through recorded data, this isolated island with limited accessibility has been naturally preserved. Today's visitors travel back in time when they set foot on the island. A number of original structures and facilities that once supported one of the oldest industrial complex known in Michigan, have recently been restored and now enhance recreational experiences. These structures include the old one room school house, seven original homesteads and a three story Victorian style house which was transported to the island over the ice around 1912. The lime kilns industrial site, an island unique point of interest, provides visitors with a rare opportunity to view remnants of the actual kilns, cooper's house and even an occasional old, hand forged square nail scattered throughout the limestone remains.

Over the years, Lime Island has served a diverse group of people and their needs. Island ownership has spanned both the private and public sectors while uses have vacillated between light industrial and rustic recreational. Early indications point to a recreational beginning, when groups gathered for a competitive game of lacrosse at the island flats. Island activity shifted to agriculture in 1948 and approximately thirty-five years later, the island's industrial heritage evolved when Lime Island Manufacturing Company purchased the property.

Increased shipping activity on the Great Lakes and the St. Mary's River created new demands for support services. Lime Island's prominent location in the shipping lanes led to its evolution as a significant refueling stop for freighters. The island's landscape changed with the addition of numerous support facilities and the harvesting of timber for fuel wood. Over the years, technological advancements however, contributed to the decreased demand for coal and oil fuel, and Consolidated Coal Company terminated its Lime Island operation.

This once thriving industrial hub was eventually gifted to the State of Michigan in 1982. Given Lime Island's past linkage to forestry and recreation, the transfer of ownership to the State of Michigan Department of Natural Resources under the direction and leadership of the Forest Management Division is a natural transition.

Lime Island offers a rare blend of educational, historical, and recreational opportunities. Solid, environmentally and historically sensitive planning will help preserve and protect existing island attractions, yet make them more accessible, enjoyable, and fulfilling for all types of visitors.

## Master Plan Goals

The State of Michigan enjoys outstanding, diverse forest recreation opportunities. Under the leadership and guidance of the Forest, Mineral and Fire Management Division, Michigan continues to focus on protection, integrated management, and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental and economic benefit of its people. Various objectives outlined in the Division's Strategic Management Plan will help direct the development and implementation of the Lime Island Master Plan.

The Lime Island Master Plan is intended to provide guidance and serve as a tool to accomplish the following goals.

- Establish Lime Island as a rustic state forest recreational facility.
- Enrich state forest educational experiences emphasizing the protection and interpretation of natural, historical and cultural values.
- Identify and enhance diverse forest recreational experiences, programs, and facilities.

## Master Plan Objectives

The proposed Master Plan objectives will provide the necessary framework to accomplish the outlined goals and establish Lime Island as one of the leading state forest recreation, nature based rustic facilities.

- Develop and promote day use
- Upgrade and protect the unique overnight accommodations
- Identify universal access (ADA Access) strategies
- Initiate a broad range of independent educational experiences and programs
- Emphasize natural island amenities and resources
- Attract, promote, and provide for rustic, nature based tourism

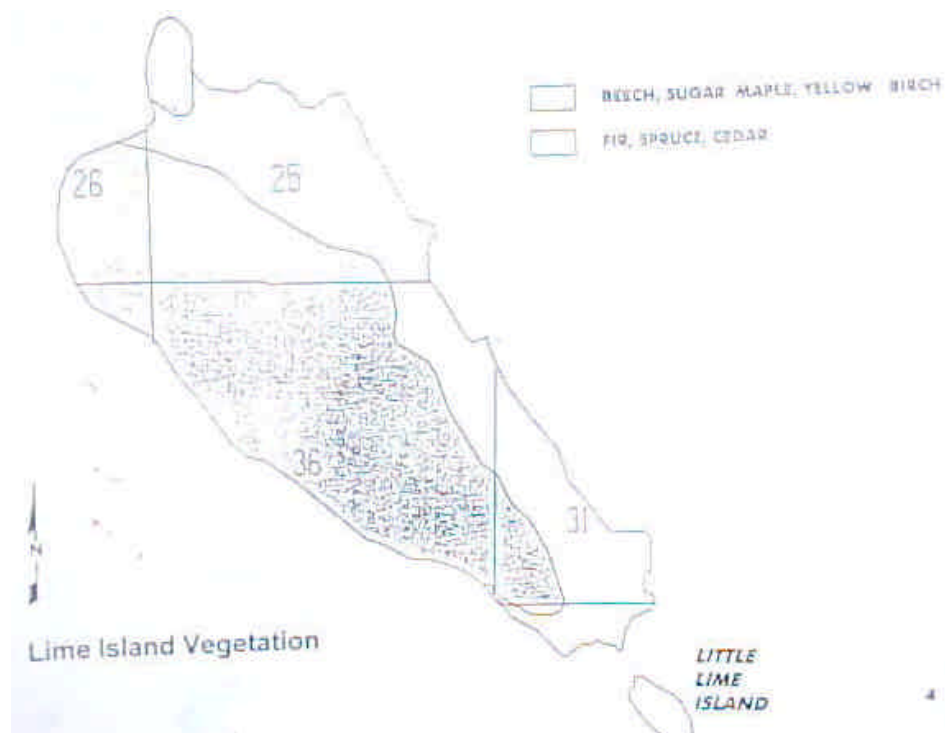
Lime Island contains a rare blend of natural and constructed features. Due to the island's limited accessibility and isolated location, previous use and development were concentrated along the northwest edge with minimal impact on the remainder of the island. This section of the report will review island vegetation, existing soil conditions, topography, wildlife, and constructed features, including trails and structures. Future recreational planning and development on the island should consider these existing conditions.

## Natural Features

### Vegetation

The vegetation covering nearly 95% of Lime Island's surface consists primarily of an equal mix of deciduous and evergreen tree masses. The balance of the land is open and located along the water's edge, around the island's center, and select areas that have been logged for fuel and lumber over the years.

Approximately 120 acres of Aspen and White Birch are mixed with almost 300 acres of Northern Hardwood clusters to form a meandering band of deciduous trees that stretches though the center of the island. Evergreen stands of Red and White Pine and Cedar trees over 150 years old cover the balance of the surface and account for over 450 acres.



## Soil Conditions

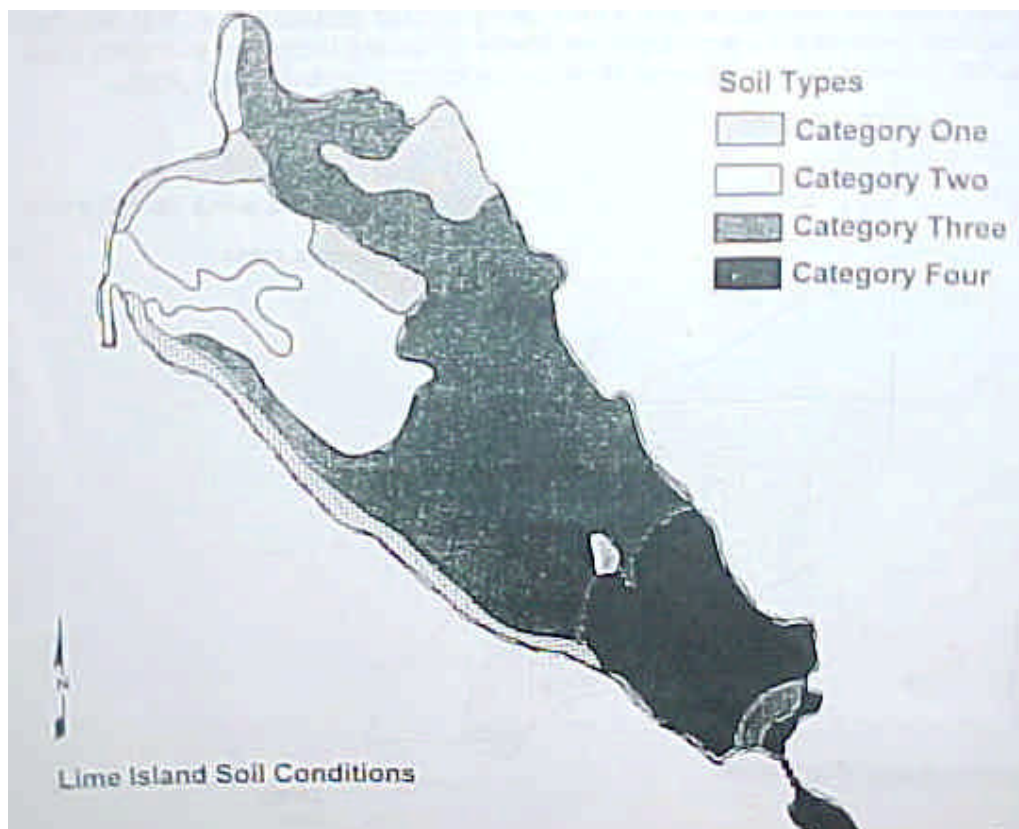
A variety of soil types and conditions cover Lime Island. These soils can be grouped into four general categories. Future recreational development will be moderately to severely limited as a result of these existing soil conditions.

Category One soils cover approximately 114 acres, consisting primarily of well drained, sandy loam soils ranging from 0% - 15% slopes. Specific soil types include Shelter-Alpena Complex and Alpena, Very Cobbly Sand Loam. Recreational development limitations are moderate to severe in these areas, depending on slopes.

Category Two soils are well drained, fine sandy loam from 6% - 35% slopes and cover approximately 168 acres. Specific soil types include the Posen Cobbly find Sandy Loan Series. Recreational development limitations are moderate to severe based on slope severity.

Category Three consist of poorly drained, nearly level soils and covers approximately 483 acres or half the island. Specific soil types include Roscommon Muck, Histosols and Aquent, Markey and Carbondale Mucks, Deerpark-Kinross, Pinconning Mucky Loam Sand, Burleigh Loamy Fine Sand, Whitney Very Cobbly Loam, and Hessel Variant Muck. Recreational development is severely limited.

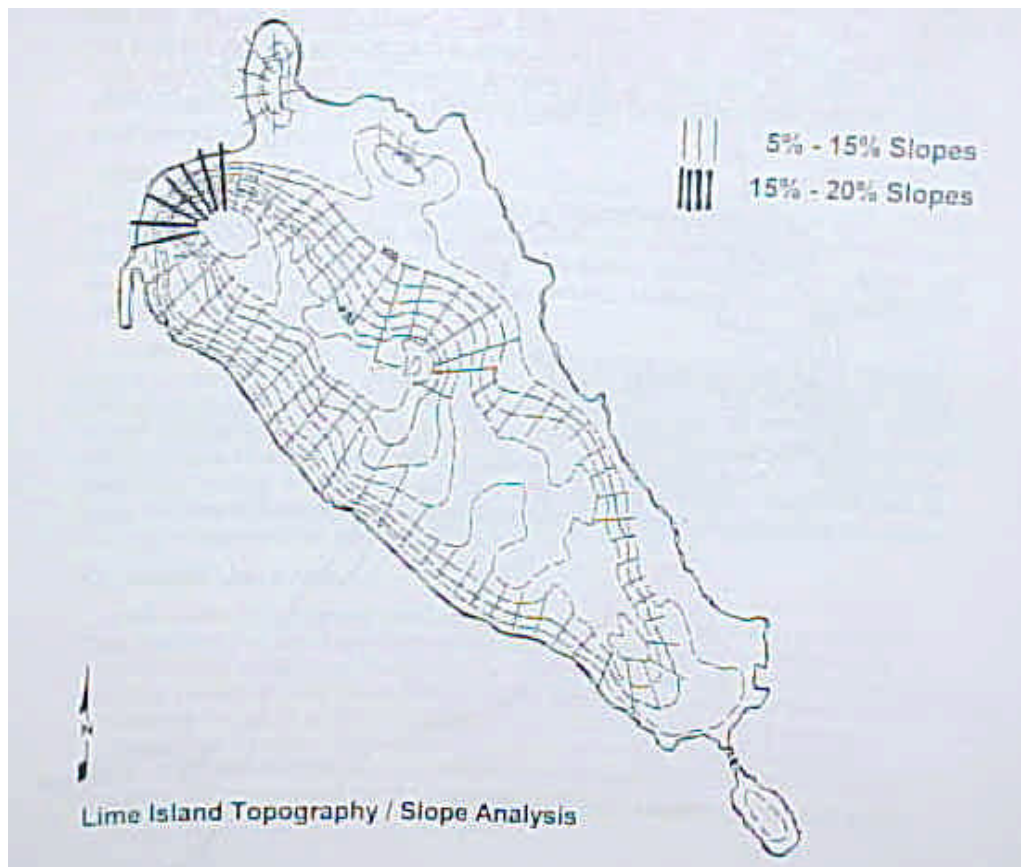
Category Four soils covering 162 acres are sandy, moderately well drained from 0% - 15% slopes. This Shelldrake Sand soil has limited recreational development opportunities for camping, picnic areas and trails.



## Topography

Nearly one hundred feet of elevation differential occurs between the water's edge and the highest topographical point located in the northwest portion of the island. Significant slopes ranging between 15% and 20% account for a majority of the island's northwestern shoreline. Moving south along the western shoreline slopes typically range between 5% and 15%. This area includes the waterfront dock, rustic cabins, the Victorian house, and the old school house. These moderate slopes continue along the western water's edge and occur again in isolated areas along the island's southeastern edge. The balance of the island including the inward portion totaling approximately 75% is primarily gently rolling with slopes of 5% or less and flattens out along the eastern shoreline.

Development opportunities and accessibility may be limited and expensive to accomplish in severe slope areas of 15% or greater. These areas however, also offer some of the best views on the island. Future improvements in these areas must be carefully planned and executed to afford maximum environmental protection.



## Wildlife

Wildlife species inhabiting Lime Island have fluctuated over the years. In 1982 observations by island residents and state staff revealed fox, mice, squirrels and snowshoe hare. More recent surveys identified moose, whitetail deer, and active



nesting osprey in various portions of the island. Pileated woodpeckers and American Kestrels have also been observed while the threatened species of the common tern now nests at the end of the old fuel dock. A variety of fish have also been recorded in the waters around the island. Species of significance include the Northern Pike, Yellow Perch, Walleye, and Herring as well as a variety of other, less abundant fish.

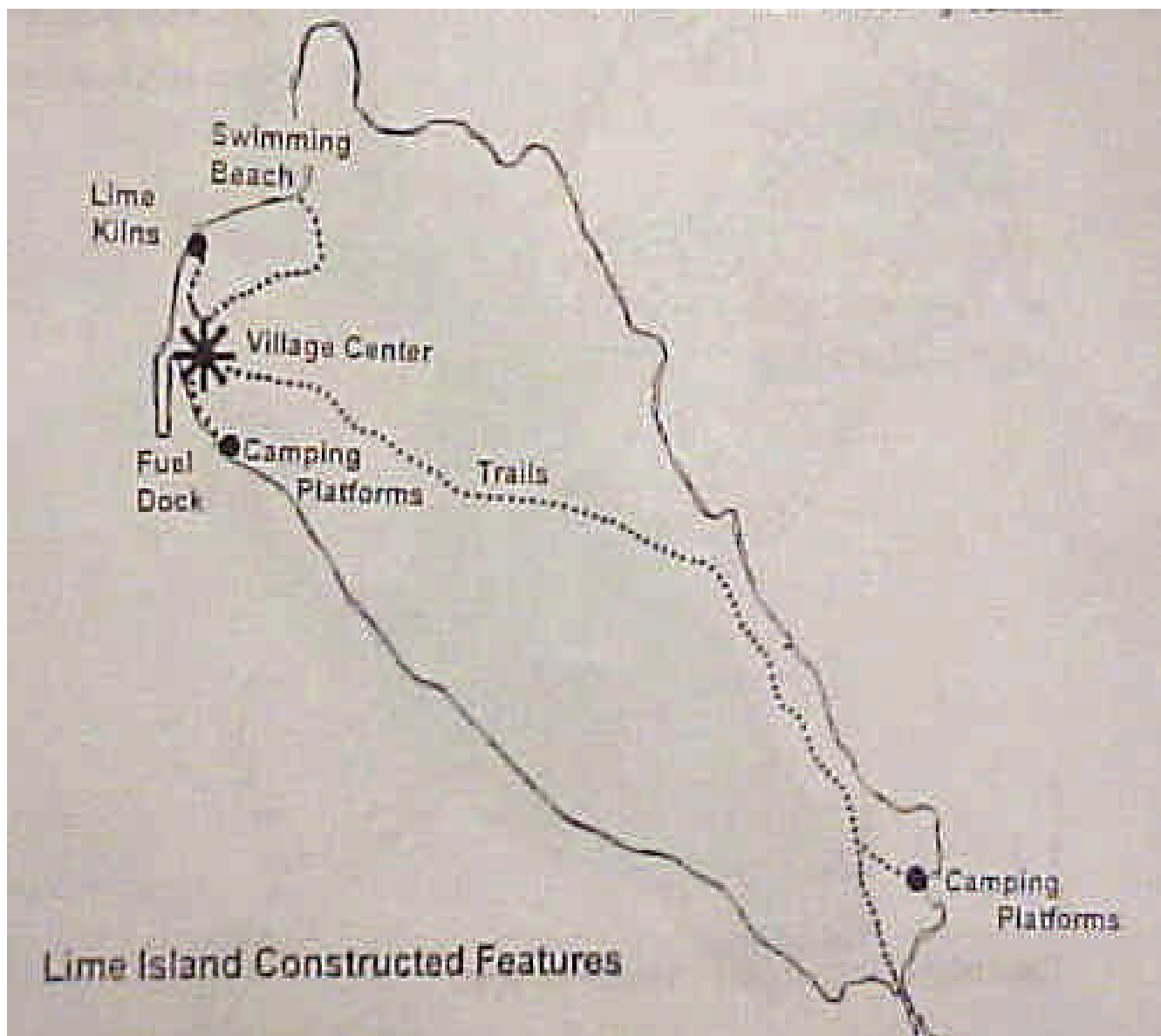
## **Constructed Features**

The island's desirable location for shipping based activity and support services significantly influenced the early shaping of the island's landscape. Permanent structures that remain from occupants and their activities include seven original homesteads, a three story Victorian house that was transported to the island over the ice, the one-room schoolhouse, the fuel dock, storage tanks, various maintenance facilities, the lime kilns, and the connecting trail system. Recreational development has been limited to additional trails, camping platforms at two island locations, and small boat docking facilities.

A number of development opportunities varying in size, cost and scope of work are located around Lime Island industrial harbor front, throughout the Island Center, and along the shoreline. Projects range from physical structure improvements including preservation, and restoration of existing facilities to general maintenance. This section of the master plan will identify projects as well as suggest potential educational programs, and displays.

### **Waterfront Development Harbor Front**

Lime Island's harbor is host to two primary categories of visitors with various needs. The first group, classified as day users, travel to the island for one day sight seeing activities or simply to utilize this island facilities. The second group, or long term visitors, stay overnight on the island for period of up to fifteen days. A third group also



utilizes the island facilities, but only indirectly. This would be persons fishing in the adjacent waters and who come to the island for safe-harbor protection during periods of stormy weather and/or rough water.

Regardless of the length of stay or the reason for stopping on the island, all island visitors share one major commonality. Every Lime Island visitor arrives by water craft and a majority of these adventure seekers dock at the waterfront harbor. This area therefore, is one of the island's most critical elements in terms of both design and function. The harbor not only welcomes visitors and serves as the gateway to the island, but also provides shelter and protection for boating enthusiasts and sportsmen. Restoration and improvements to the Lime Island docking facilities must be of the highest priority. If visitors cannot safely dock at the island, they simply will not come. DNR staff have already been told many visitors have by-passed the island due to the lack of the docking facilities. A detailed harbor study that addresses desirable and accessible boat slip design and layout has been prepared. Provisions for swimming, sunning, and restroom facilities must accommodate and meet the needs of the various visitor groups. Provisions for temporary docking by moderate size tour type boats and smaller vessels as well as more permanent type slips or mooring locations for overnight visitors must be coordinated and integrated into the final design of any docking facilities.

## **Organized Use Areas**

Current waterfront activity and uses occur randomly with little organization or definition. Clearly defined use areas providing user friendly amenities will help facilitate and enhance a variety of individual and group uses. The development of waterfront use areas will focus solely on day use activities. These waterfront use areas will provide designated areas for people to gather together, prepare and consume food. Permanent amenities such as tables, over-sized fire rings, and an overhead/windbreak type shelter will provide conveniences for visitors. Both individual and group gatherings should be accommodated.

## **Industrial Plaza/Walkway**

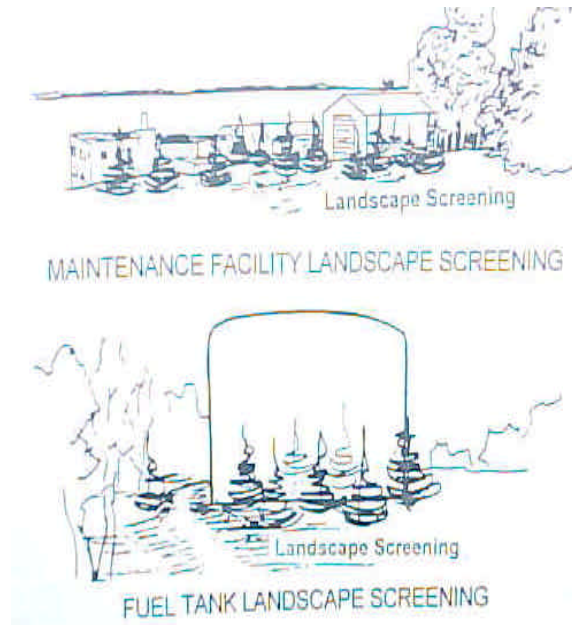
Several significant pieces of industrial equipment decorate the island's hillside. The once active tools that helped stimulate productive shipping activity now lay motionless, scattered across the rolling green lawn. The equipment however, even in it's dormant state, still communicates portions of Michigan's shipping history. Passing freighters, combined with the abandoned mechanical devices, reconfirm the island's vital link in the waterway transportation system.

The remaining equipment supported by interpretive signage will communicate historic industrial information. Permanent signage with graphics and written text will help provide the missing pieces and complete this storytelling opportunity.

The preferred method of displaying this equipment will be to leave each piece in its current location and utilize the existing walkway/road that begins near the island arrival area, parallels the basin shoreline and circles out onto the old coal dock. Design elements to be incorporated adjacent to the walkway would include all-weather information signage describing the actual equipment and the function of each piece of

equipment. This signage should also be utilized for the clam-shell buckets on the old coal dock.

The two large 1.75 million gallon storage tanks located just north of the coal dock and the support buildings on the waterfront need to be excluded from any visitor interaction. Landscape screening, consisting primarily of evergreen trees, will help to minimize visitor encroachment and vandalism. The department is investigating the feasibility of both emptying these tanks and removing them. The costs of this removal must be weighed against major maintenance costs associated with maintaining the structures as they are. This maintenance cost must also include the cost of maintaining the foam covering over both tanks.



The large block building has been and is continuing to deteriorate significantly. Structural cracks are very evident on the outside of this building as well as the chimney. However, due to its historical significance, efforts will be made to restore and maintain this structure. The decision to restore or remove the building will be based on an assessment of the cost of restoring and maintaining the structure as well as the cost of razing and removing it.



## **Waterfront Camping Platforms and Boardwalk**

Elevated, wood deck platforms provide convenient waterfront camping in designated areas. The camp sites are linked together with a continuous boardwalk that also connects with a viewing platform. The boardwalk begins at the waterfront arrival area and meanders along the shoreline slightly inland through the woods, terminating at the final campsite.

## **Lime Kiln Site**

Just a short walk north of the island's harbor, located along the northwest shoreline, lies one of the island's most unique points of interest. The lime kilns dating back over two hundred years reveal traces of the island's early industrial development. These once productive lime kilns were used to process quarried limestone into powder by driving out the moisture. The lime, from which the island derives its name, was then loaded into barrels and transported off the island for construction purposes.

## **Preservation**

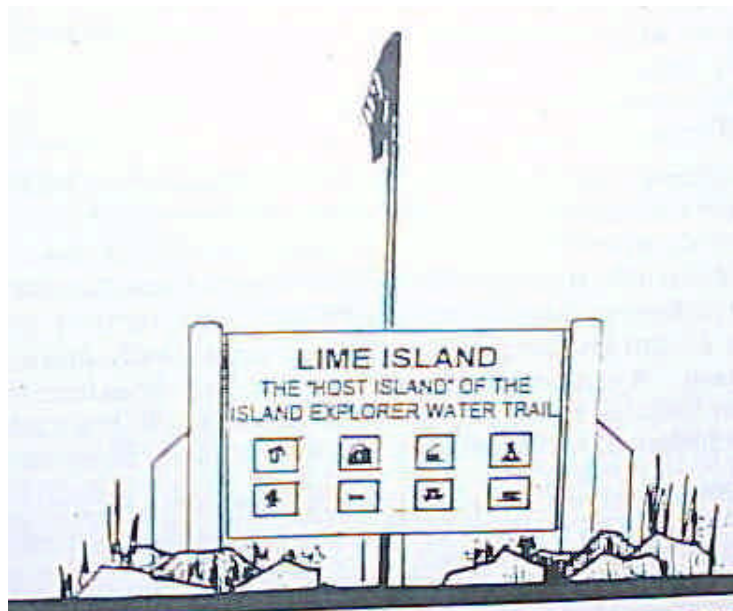
The structures, engineered with precision and carefully arranged became covered and somewhat protected by native vegetation and soil as the kilns became inactive. Recent archeological studies and human activity however, have exposed the kilns to the natural elements, thus expediting the deterioration process of the structures. Permanent records in the form of professional photographs for future publications and interpretive signage should be collected. Preservation of these structures will be via photos and interpretive signing at the kiln site.

## Island Center

A significant and notable feature dominating the island center defined by the historic buildings and the old fuel dock is the rolling green hillside visible for miles. This inviting open space is naturally framed by the water's edge and four of the rustic cabins prominently located atop the hill where they take advantage of spectacular views of passing freighters. This moderately sloping lawn with gradients ranging from approximately 10% – 15% creates design challenges to achieve a universally accessible pedestrian circulation system. A consistent, continuous crushed limestone walkway that connects island center features as well as link these features with the harbor front will clearly define desired circulation patterns and direct visitors to island attractions.

## Island Flag Court

One of the key elements located prominently in the rolling green hillside is the identification sign for Lime Island. While most visitors already know the island by name, several simple design modifications will emphasize the island's identity. Low maintenance landscaping such as ornamental or native grasses and hardy perennials can be used as accent plantings. The existing flagpole should be used to display the United States and the State of Michigan flags only.



Lime Island Welcome Sign and Flag

## Tent Camping Areas

These areas will provide overnight accommodations through camping tent sites for individual and/or group activity. All tenting (excluding waterfront platforms) will take place in this designated area only. Picnic tables, fire rings, and water are to be conveniently located in this area. There will be tent camping sites identified at this location, east of the Island Center and the rental cabins.



## Rustic Cabins

The original homesteads once occupied by island residents have been partially re-stored, to their rustic condition. The two and three bedroom cabins will provide overnight accommodations for island visitors. Initial development of the island must include completing the restoration work on these cabins, including roof maintenance and window replacement, and cement “shake” style siding if the total loss of some of the cabins is to be prevented.

In 1999 a “photo-voltic” electrical system was installed to provide electricity to the island cabins and maintenance structures. Additionally, a back-up generator will be installed to provide back up power in case of failure of the photo-voltic system.



One additional item guaranteed to enhance the overnight experience will be a copy of a Traveler’s Log Book for overnight guests to sign. A log book will be placed and remain in each cabin.

## Victorian House



The Victorian house must be maintained as a visitor attraction and museum, but will not be expanded to create any greater use than the “stroll-through” visitor. Its unique architectural character and Victorian charm make this one of the island focal points.

### Universal Accessibility

Inside the Victorian house, universal accessibility will be limited to the lower level with access gained from the southeast entrance door. However, some significant repairs will be required here to make this entrance universally accessible. The current shed/entrance attached to the east end of the house will be removed. Tentatively, no public access will be provided to the upstairs portions of the house/museum, which will negate the necessity of doing major structural changes to the house to meet ADA accessible requirements. However, if a continuous feed video of the second floor amenities viewed on the first floor would meet the intent of ADA accessibility, then the second floor could be opened to those who could climb the stairs. If this is not allowed, activities and displays would have to be restricted to the main floor. The upper floors could then be utilized for storage as needed.



## One Room Schoolhouse-Museum

The one room schoolhouse that once served as the island's educational center offers similar benefits for today's visitors. This unique, recently restored one room school-house can carry curious minds back generations as they pass through the front door. This schoolhouse could provide display settings for additional island information, photographs, and other significant memorabilia. Permanent displays or exhibits will capture and preserve Lime Island's rich heritage for future generations. The size and condition of the schoolhouse does not lend itself to more than an informal museum setting. Conceptually, the schoolhouse museum is intended to be self-service. This can be accomplished by recognizing designated hours of operation when visitors can enter and browse the attractions at their leisure.

There will be some significant repairs required for this schoolhouse/museum. The chimney inside the building is causing the eastern wall of the building to bulge outward. The simplest resolution to this problem will be to remove the actual chimney and replace it with a "false" chimney, to retain the "ambience" without the hazards. Repairs will also need to be made to the exterior siding, due to the wall bulging outward. At the same time, the structure should be sided with the cement shake style siding. The accessible ramp into the rear entrance must also be renovated to meet ADA requirements.



Information describing navigation requirements around Lime Island, freighter architecture and design, active ships, materials being transported, and ports of origin/destination will provide educational opportunities even during the absence of freighters. This information will be part of the "museum" ambience of the old schoolhouse.

In addition, creative educational programs emphasizing natural systems and historical development can be presented in the schoolhouse, but must be independent in format. Creative methods of communicating important island facts and history will focus on the following topics.

## **NATURAL SYSTEM**

- Plant and wildlife habitat
- Geological formations

## **HISTORICAL DEVELOPMENT**

- Event timeline
- Industrial activity
- Facility Development

These permanent displays housed in the old school house/museum will serve as an important mechanism that captures, preserves, and communicates island history.

## **Trail System**

The existing trail system provides reasonable access by foot to main island features beyond the Island Center. These points of interest include Little Lime Island, and the camping platforms located on the south part of the island. Existing trails are roughly cut with limited signage and selective pruning. Trails follow the natural terrain thus some portions are rugged and steep making universal access in some areas difficult or impossible.

A limited amount of maintenance will be required to ensure continued trail use. This will consist primarily of periodic surface cutting and inspections to keep trails free from fallen trees, limbs and other debris.

## **Trail Enhancements**

Directional signs providing valuable user information (trail layout, orientation, distances, etc.), benches at key locations to offer resting opportunities, and tables for pack in picnics, will offer trail enhancements for the visitors.

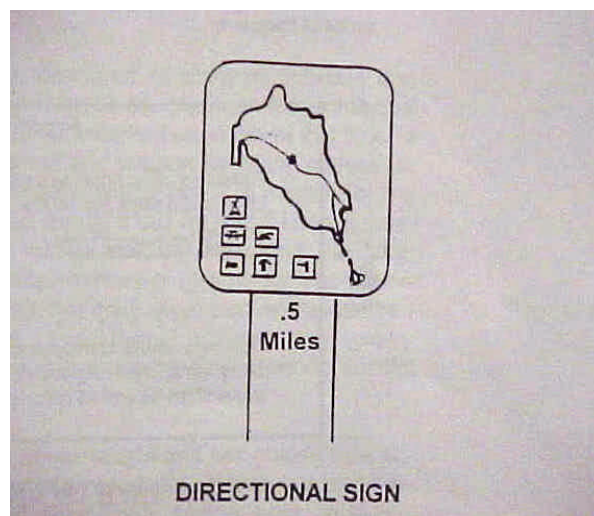
## **Common Tern Habitat Restoration**

Once numbering over 6,000 breeding pairs in Michigan, common terns were found on every Great Lakes shore. Data from 1992 suggest that the population has decreased to an estimated 1,400 breeding pairs. Several factors have contributed to this decline including loss of habitat, competition with gulls, predation, and effects of contaminants. As a result of these factors, the common tern was officially listed in Michigan as a threatened species in 1978 and has recently undergone a status assessment by the US Fish and Wildlife Service in the Great Lakes for possible listing as federally endangered. During 1997, Lime Island supported the largest common tern colony in the

Great Lakes (649 breeding pairs). Common terns were using the old coal dock and a rock pile in the harbor as their nesting sites. At that time, Lime Island was one of the most valuable colonies in Michigan. Unfortunately, in 1999, the colony abandoned the island to find nesting habitat elsewhere. Dense vegetation cover on the coal dock made the terns more susceptible to entanglement and predation, in turn reducing the nesting and hatching success of the colony. In addition, a torrential rain early in the spring had flooded the suitable habitat where the 20 remaining nests were located.

Restoring suitable habitat on Lime Island would be extremely beneficial to this species in decline.

## Signage Program



A comprehensive signage program addressing informational needs and educational opportunities for Lime Island visitors can be divided into two primary categories, directional, and educational. Whatever signs are used, an effort must be made to keep signing to a minimum acceptable level, providing necessary information to the user while not creating a lot of sign pollution.

Directional signs will assist visitors travel to and from various island attractions. Sign contents should include trail layout, distances, encouraged activities (hiking, bird watching) directional arrows and overall island spatial relationships. Information must be communicated and presented in a consistent, uniform format. Intermediate signs placed periodically along trails will provide users with valuable information. This will enable them to plan and time their activities accordingly.

Educational signs communicate interesting island specific facts and dates appropriate to the location. These learning opportunities should be designed for independent, self-initiated activity. Permanent signs will enhance viewing and educational experiences.

Several areas of focus could include educational signs communicating interesting Lime Island facts designed to provide educational opportunities for visitors through

narratives and visual aids such as photographs, sketches, and diagrams. These interpretive aids will provide users with significant benefit and a more complete experience during the absence of the actual subjects. The following are some examples of educational signs that could be used:

Rare, Threatened and Endangered Species – At one time the Common Tern, a threatened bird species, settled at the end of the coal dock. This habitat was conducive to the specie's nesting practices. Current barriers and endangered species notices offer protection for nesting terns, however, permanent signage would accomplish both protection and an educational aid that would teach visitors about the birds, their nesting habits, desired food supply as well as other interesting facts about the terns. Additional endangered species signs for other protected animals that may inhabit the island currently or in the future should be highlighted.

Lime Island's rich heritage and natural resources provide a unique blend of educational and recreational experiences. Through the implementation of this Master Plan, Lime Island could serve as a model for future state forest projects.

A number of improvement and development opportunities were previously identified. These projects followed by a brief description of the proposed scope of work to be completed, have been designated as either a high, medium, or low priority. The priority designation has been based on the following criteria.

High – Overall project viability and completion are at risk due to ongoing activity, natural or other. Examples include erosion, deterioration of structures, vandalism, and similar activities.

Medium – Completion of these items is required to provide a basic level of experience on the island. This criterion relates to functionality. Examples include the provision of basic services such as shelter and water.

Low – The addition of these items will enhance the basic island visit. These projects are not necessary for island exploration and use, however, are intended to expand and maximize the educational and recreational opportunities on Lime Island.

#### **Harbor and Waterfront Use Area – Priority Status – High**

Safe, convenient access to Lime Island will be the key to the success of this rustic State Forest facility. The deteriorating docking facilities must be repaired and expanded to accommodate the many and varied size boats that can be expected to visit the island. The recently completed Harbor study should be a good beginning point for developing and upgrading the Lime Island docking facilities.

A detailed layout plan identifying desired elements, locations for the waterfront use area and construction details will need to be completed prior to the implementation of this use area. Construction of the oversized fire rings and wind breaks, and placement of portable toilets will be the extent of the development at the coal dock.

#### **Industrial Plaza/Walkway – Priority Status – Low**

Concepts and details for the interpretive signing of this display will need to be completed. Maximum benefit and enjoyment of the old industrial equipment display will be enhanced with signs explaining the type and role of each piece. A narrative detailing early industrial activity on the island will compliment this display. This element should be easy to maintain and be universally accessible.

The existing walkway/road will need no further development. Ongoing maintenance will be the only necessity.

#### **Lime Kilns - Priority Status – High, preservation through interpretive signing only –**

Natural elements including the wind and rain are contributing to the rapid deterioration of these historic lime kilns. These structures are a rare and significant

island feature that must be preserved through signing and interpretive displays at the kiln site. A detailed development plan for this area should be prepared and identify interpretive sign details and locations to provide background (historical) information about the kilns.

Permanent photographic records should be prepared by a professional photographer immediately. Photographs of the existing structures will serve several purposes, including a record of the past and also as graphic aids to develop interpretive signs and museum type displays. These displays could then be exhibited in the village area, thus enabling visitors to observe and learn about the kilns and the associated activities without actually traveling to the site.

## **Island Center Implementation Projects**

### **Island Center Use Area** - Priority Status – Medium

A detailed layout plan identifying desired elements, specific locations for the use area and construction details will need to be completed prior to the implementation of this use area. The Island Center use area could be constructed in multiple phases. However, the only amenities planned for this area are the portable toilets, picnic tables, and fire rings.

### **Rustic Cabins** - Priority Status – High

Ongoing restoration of the original homesteads must be completed as soon as possible. Some interior work has already been completed. Exterior renovations including any necessary painting and/or staining, develop winterization techniques and procedures including seasonal window shutters, and installation of low maintenance siding are critical.

### **Victorian House** - Priority Status – High

Restoration of this island attraction should begin with the removal of the shed at the east side of the house and creation of a universally accessible entrance at this southeast corner. Further restoration work must involve the foundation, permanent low maintenance siding, and roof repairs.

Interior renovations will consist solely of making the first floor universally accessible. The first floor space should be utilized for museum type displays covering the history of the house, island, and visitors to the island. A Lime Island history book and Travelers Log should also be maintained in the house.

### **One Room Schoolhouse** - Priority Status – Medium-High

Some of the most critical renovation work still necessary on the schoolhouse/museum will be to make the entrance universally accessible. This will primarily entail expansion of the landing in front of the entrance door.

Due to limited space and the nature and charm of this schoolhouse, this structure should be maintained and utilized as another or even the primary island museum.

Museum type displays featuring island amenities such as the lime kilns or freighter activity should be incorporated into this space.

Although a great deal of restoration work has already been done with this schoolhouse, some major renovation is still necessary. The current chimney is causing the east end wall of the building to bulge outward. If not corrected, the chimney could conceivably cause this east wall to collapse. Repairs should entail removal of the chimney, replacement with a false chimney, and repairs to the exterior siding.

#### **Trail System - Priority Status – Low-Medium**

Trail system enhancements to be undertaken should include general trail maintenance (brushing and clearing), and the addition of amenities such as picnic tables, benches, and a limited amount of interpretive signage. A general trail system plan that identifies enhancements and provides detail regarding the location, design and construction details could be completed and used to direct implementation efforts.

#### **Common Tern Habitat Restoration – Priority Status – High**

Restoring suitable nesting habitat for the Common Tern on Lime Island would involve re-exposing the ground surface of the coal dock which should reduce the amount of vegetation and increase the likelihood of re-colonization. Implementation of interpretive signing, fencing the nesting area during nesting season and reducing predator attractants such as litter, leashing dogs and enjoying the birds at a distance would all assist in the re-colonization effort.

#### **Signage Program - Priority Status – Medium**

The development of design standards for directional and educational signs will be necessary to ensure a uniform and compatible signage program. Specific items to be addressed in the standards include overall content, graphics, format, layout, materials and construction techniques. These design standards should also address the potential for over signing to the point of creating sign pollution.

Lime Island has served as man's recreational playground for many years. Recreational activities have ranged from the early games of lacrosse that occurred prior to the 1850's at the island flats during low water times, to the construction of the Saint Mary Club, a thirty room resort hotel in 1890, to today's current rustic renovation of existing structures and enhancements of recreational facilities by the State of Michigan. Lime Island's maritime mystique, combined with over 900 acres of northern Michigan's woodlands, trails and shoreline offer some of the finest rustic nature based recreational opportunities. Lime Island's rare combination of educational, historical, and recreational elements will continue to satisfy both the passive and active recreational needs of a wide variety of user groups. The Lime Island Master Plan is intended to serve as a guide to help direct future island planning and development. Implementation of high priority items should be completed at the earliest opportunity to insure protection of both the cultural and natural island resources while encouraging public use.

### **Implementation Summary Items**

#### **High Priority Items**

- Harbor, Docks, and Waterfront Use Area
- Lime Kiln Display Preservation
- Rustic Cabin Restoration Completion
- Victorian House Restoration
- One Room Schoolhouse Restoration Completion
- Common Tern Habitat Restoration

#### **Medium Priority Items**

- Island Center Use Area Design and Construction

#### **Low Priority Items**

- Industrial Plaza/Walkway
- Trail System Enhancements

The Lime Island Master Plan should be reviewed, revised and reprioritized periodically to respond to changing recreational and habitat needs.